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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,170	12/21/2000	Sang On Park	0465-0791P	6704
2292	7590	03/21/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			PSITOS, ARISTOTELIS M	
			ART UNIT	PAPER NUMBER
			2653	
DATE MAILED: 03/21/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/741,170

**Applicant(s)**

PARK, SANG ON

**Examiner**

Aristotelis M Psitos

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-7 and 9-20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

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## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/22/05 & 12/20/04 has been entered.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1 Claims 1-4, 7, 10, 13, 15, 16, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al further considered with Masaki et al.

With respect to the independent claims, Kuroda et al discloses a spindle speed control system using the separated wobble signal read from an optical disc. There is no specific mentioning that the speed control is performed in a free running state, i.e., as claimed – only with focus ability.

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Masaki et al discloses in this environment the ability of performing appropriate "free running" operational state – i.e., the focus servo on and the tracking servo off, while the spindle motor is on – see the description of figures 22-23 and starting at col 16 line11.

It would have been obvious to modify the base system of Kuroda et al with the above teaching from Masaki et al, motivation is to obtain a stable system operational mode/ as described by the Masaki et al disclosure – i.e., get the disc up to speed as well as permitting the disc to operate stably and hence permit subsequent signal recording abilities as discussed in Masaki et al.

With respect to claims 2,3,4,10,15, 16,17 and 20, these are considered present in the primary references, i.e., the wobble signal itself as well as the pll limitation.

### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

2. Claims 5,6,11,12,18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1, 7 and 13 above, and further in view of Buchler.

The ability of detecting the wobble signal by use of optical detectors is standard and as further depicted by Buchler see col. 8 line 24 to col. In Buchler however the tzc control is performed in the te servo section.

It would have been obvious to modify the base system of the references relied above with the ability of using such window comparison and tzc for detecting the boundary of the track for the speed control because placement of the optical light spot upon the track is necessary to ensure detection of the wobble track and comparison thereof, use with the te servo components permit for better signal reproduction as taught by Buchler.

3. Claims 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1,7 ad 13 above, and further in view of either themselves or Ilmura.

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Kuroda et al merely designates a wobble signal detector with no particular. The examiner concludes that such elements contain the claimed limitations of claims 9 and 14 as further depicted by limura. Either the reference to Kuroda et al inherently possesses such limitations, or alternatively such limitations are well known for performing such abilities as taught by limura.

It would have been obvious to modify the base system of Kuroda et al with the use of such standard elements for the wobble signal separator/detector, motivation is to use standard equipment and save valuable resources.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tomita, see the discussion with respect to figure 18, col. 28-48.

Park et al, col 3 lines 23-46.

Yanagi, col 5 lines 10-36.

Baba, col 7 lines 1-12.

Eguchi et al, col. 4 lines 57 plus.

Each of these secondary references could be relied upon in place of the Masaki et al references for teaching/disclosing the ability of having a "free-running" operational state, i.e., the focus servo on, and the tracking servo off.

Takata et al and Suzuki are cited as tzc and widow circuitry in this environment for their ability to detect the boundaries of optical tracks. Osada teaches the focusing ability subsequent to spindle lock ability and subsequently followed by the te ability.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psitos  
Primary Examiner  
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A handwritten signature in black ink, appearing to be 'A. Psitos', written over the printed name and title.

AMP